

REMARKS

This application has been reviewed carefully in view of the Office Action mailed May 12, 2004. In that Office Action, claims 20-21 were rejected under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description requirement. Claims 1-2, 13, and 17 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Morioka et al., U.S. Patent No. 5,995,111 in view of Kearney, U.S. Patent No. 4,174,836. Also, claims 3-12, 14-16, and 18-19 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Morioka et al., in view of Kearney, and further in view of Sato, U.S. Patent No. 6,201,517. Last, claims 20-21 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Morioka et al., in view of Kearney, and further in view of Itai et al., U.S. Patent No. 5,880,709.

The above-described rejections are addressed as follows:

I. REQUEST FOR INTERVIEW

In light of the present response, Applicants believe that the claims are in condition for allowance. Nevertheless, the Applicants request a telephonic interview to try to efficiently resolve any claims that the examiner does not feel are in condition for allowance.

II. AMENDMENTS

An amendment to correct an obvious error does not constitute new matter where one skilled in the art would not only recognize the existence of error in the specification, but also the appropriate correction. (See, M.P.E.P. § 2163.07 (II).) Applicants have corrected page 12, line 24, to recite “the progress of the game” rather than “the progress of the gate.” The correction of this obvious error does not constitute new matter, and one skilled in the art would not only recognize the existence of error in the specification, but also the appropriate correction. This correction is supported throughout the specification, such as at: page 2, line 5; page 3, line 28; and page 7, line 34.

Applicants have amended claim 1 to improve readability and better conform with commonly accepted formatting. These amendments do not pertain to patentability, and do not constitute new matter.

5 **III. REJECTIONS UNDER 35 U.S.C. § 112, FIRST PARAGRAPH**

Claims 20-21 were rejected under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description requirement. Applicants respectfully traverse the rejections of claims 20-21.

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Support for these two claims, which recite the element of the game operations selecting the playable object or object portion, can be found in the Specification. To begin, Applicants note that page 7, line 31, recites:

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The computing means 1 comprises game space processing means 1A for computing the layout of a plurality of objects in a world coordinate system of a virtual world space **in accordance with the progress of the game as determined by the game program**, or in accordance with input operations performed by the player by way of the game input section 4. (Emphasis added)

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Further support is found on page 12, line 21, which recites:

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... the present invention may yield another advantage of providing representations in which even when, of a plurality of objects located in the world coordinate system, an **object located in a deep position is brought into focus in response to the progress of the game** or operations performed by the player. (Emphasis added, and as amended.)

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Since an object of our invention is that a playable object or object portion from a plurality of objects becomes playable by bringing it into focus, this recitation specifies that the selection of objects by bringing them into focus, can be made either by input from a player or from the progress (operations) of the game itself. Applicants respectfully request the Examiner withdraw the rejections of claims 20-21 under 35 U.S.C. § 112.

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IV. BRIEF DISCUSSION ON THE INVENTION

3-D graphics has become common in video games, allowing characters to move in a depth dimension. Using traditional 3-D technology, only objects in front, such as
5 playable characters, are in focus. Other objects are blurred with respect to their depth. To maintain a sense of depth perception, playable characters moved into the depth dimension become blurred using this technology.

Under an embodiment of the present invention, a playable object is selected by
10 either player input (e.g., manual or line of sight input), or the progress of the game. The identity of the selected playable object is then communicated on the screen by adjusting the depicted focal depth to be the depth of the playable object. Thus, the playable object is focused upon, and objects in front or behind the playable object are blurred based upon their respective depths from the playable object.

Advantageously, when a playable object moves in the depth dimension, this feature continuously communicates both the identity of the playable object, and the relative depths of the various objects, without requiring cursors, cross-hairs, or other visual gimmicks. If
15 another object becomes the playable object, that change is communicated, along with the relative object depths from that new playable object. The cited references fail to disclose or suggest this feature.

As an example, consider a target shooting game, where the next target (i.e., the
20 playable object) is communicated to the player by placing it in focus on the screen, with other objects blurred based upon their depth from the target. When the game determines the target is changed, a new object is placed in focus on the screen. The player immediately realizes the change in target has occurred, and the focused image of the new target aids in the player's aim at the new target.

As another example, in a fighting game, the battle maneuvers of your character or
30 your opponent may occur in the depth dimension. Under the present invention, a playable object (opponent) would continue to be in focus, and hence still playable, whereas, under traditional 3-D technology, the opponent would become blurred as the distance between your character and the opponent changed.

V. **REJECTIONS UNDER 35 U.S.C. § 103(a)**

Claims 1-21 have been rejected under 35 U.S.C. § 103(a) under various combinations of the cited art. Applicants respectfully traverse these rejections.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation to modify the reference or combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references, when combined, must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination must be found in the prior art and not based on an applicant's disclosure. (See, M.P.E.P. § 706.02(j)).

Applying the requirements of M.P.E.P. § 706.02(j) to the facts of the present application, the cited art clearly fails to render the claims of the application obvious. As described below, the cited patents fail to disclose all of the recited claim elements, in particular the element of putting playable objects in focus, and blurring other objects based upon their distances from the in focus, playable object. The Office Action also fails to provide any suggestion or motivation that the references be combined to arrive at Applicants' claimed invention, and there is no reasonable expectation of success in combining the references to teach the claimed combination.

A. **The Cited References**

Morioka et al. relates to an image processing apparatus that includes a blur processor. Blurring is identified in Morioka et al. for expressing certain qualities. Of relevance to the present discussion, these qualities include using blur to provide depth perception (e.g., making objects near a focus depth clear, and blurring objects distant from the focus depth). See, col. 1, lines 46-50. As described in Morioka et al. (see, FIG. 1), this is embodied in a blur processor showing depth perception between a building 110 on which a camera is focused and a goal 116 positioned far away from the focal depth. See, col. 4, lines 15-19. **Morioka et al. fails to suggest any use of focus in identifying an object**, such as by selecting an object, and then adjusting the focus to be on that object.

The Office Action asserts that an object of the Kearney invention is to provide to game players an environment that simulates the visual, audio, and physical conditions of

an amusement type game, which in the recited embodiment involves the use of a periscope column, a graticule, a simulated waterline, and a water surface showing wave action in a submarine type game. However, Kearney fails to suggest a computational device identifying an object as playable **by bringing it into focus** (or by any other means).

5 Instead, the Kearney device appears to use a game periscope and visual cross-hairs (i.e., “the graticule of FIG. 4”) to identify a torpedo direction, which is not required to have anything to do with a potential target. Indeed, it is not clear that the computational device presumably in Kearney ever identifies a given object as playable on the display. In any case, just as the cursor of the prior Itai et al. reference failed to suggest the use of focus in
10 identifying a playable object, so too do the periscope column, cross-hairs, and other devices of Kearney fail to suggest the use of focus in identifying a playable object.

B. The Cited References, When Combined, Fail to Teach or Suggest All the Claim Limitations

15 The Office Action asserts that Kearney teaches a gaming device having objects or specific portion being playable by a player, and, “[t]herefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant’s invention was made to modify Morioka to include specific objects or the specific portion thereof as is playable by
20 game players and determining the objects of a specific portion thereof as being in focus according to operation performed by a player as taught by Kearney to provide game players an environment that simulates the visual, audio, and physical conditions of an amusement type game” (see, end of page 3 through page 4, end of first paragraph).

25 Applicants respectfully traverse the assertion that the cited combination discloses all the recited claim elements of the claimed invention. More particularly, the following portions of the claims are not disclosed in the cited references.

Claim 1: “wherein the computational processing device performs settings in such a way that a **specific object or a specific portion thereof is brought into focus** and the plurality of objects placed in the world space are blurred according to the depths thereof relative to the specific object determined as being in focus or the specific portion thereof determined as being in focus, wherein **the specific object or the specific portion thereof is playable** by game players.”

Both Morioka et al. and Kearney fail to disclose a computational processing device that brings a specific, playable object into focus.

Claim 13: “determining, from the plurality of objects, a **specific object** or a specific portion thereof **as being in focus according to operations performed by a player**”

Both Morioka et al. and Kearney fail to disclose the determination of a playable object as being in focus according to player operations.

Claim 17: “computational processing device is configured to calculate image data such that **whichever object or object portion is identified**, that object or object portion **is displayed in focus on the display**, and other objects or object portions of the plurality of objects are blurred on the display according to their depths relative to the identified object or object portion.”

Both Morioka et al. and Kearney fail to disclose a computational processing device configured to blur objects based on their depths relative to an identified object.

Even combined, the cited references fail to disclose a computational processing device configured to calculate image data such that whichever object or object portion is identified, **that object or object portion is displayed in focus** on the display, and **other objects or object portions of the plurality of objects are blurred** on the display according to their depths relative to the identified object or object portion. In short, the references fail to disclose a use of focus on specifically identified playable objects (or portions), as is claimed.

Because the cited art fails to teach or suggest all the claim limitations, the Office Action fails to establish a *prima facie* case of obviousness for claims 1, 13 and 17. Dependent claims 2-12, 14-16 and 18-21 incorporate the limitations of independent claims 1, 13 and 17. Accordingly, the rejections of claims 1-21 under 35 U.S.C. § 103(a) are improper, and Applicants respectfully request they be withdrawn.

C. The Cited References Fail to Provide Any Suggestion or Motivation That the References Be Combined

To meet its burden of showing *prima facie* obviousness, the PTO must necessarily show some objective teaching that would lead one of ordinary skill to combine the relevant teachings to solve the problem confronting the applicant. See, e.g., *In re Fine*, 837 F.2d 1071, 1075 (Fed. Cir. 1988).

The Office Action, in asserting a suggestion or motivation to modify Morioka et al. in view of Kearney, recites that to do so would “provide game players an environment that simulates the visual, audio, and physical conditions of an amusement type game.” (See, page 4, end of first full paragraph.) As previously noted, Kearney provides this feature by providing a periscope column, a graticule, a simulated waterline, and a water surface showing wave action.

The asserted suggestion for combining the references is not applicable to Morioka et al. The Morioka et al. device is not identified as a game that would benefit from the use of a periscope, cross-hairs, water levels, or other such disclosed features to simulates the visual, audio, and physical conditions of a submarine environment. Furthermore, the use of target ships is not suggested by Kearney as pertaining to a simulation of visual, audio, and physical conditions.

Because the asserted suggestion to combine the cited references (from Kearney) is not applicable to Morioka et al., and because Morioka et al. is not identified as being subject to the problem that Kearney purports to solve, there is no suggestion or motivation to combine the references or modify Morioka et al. with the alleged teachings of Kearney.

Because the cited references fail to suggest that Morioka et al. be modified in view of the alleged teachings of Kearney, the Office Action fails to establish a *prima facie* case

of obviousness for claims 1, 13 and 17. Dependent claims 2-12, 14-16 and 18-21 incorporate the limitations of independent claims 1, 13 and 17. Accordingly, the rejections of claims 1-21 under 35 U.S.C. § 103(a) are improper, and Applicants respectfully request they be withdrawn.

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**D. There Is No Reasonable Expectation of Success in
Combining the References to Teach the Claimed
Combination**

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The Office Action acknowledges that Morioka et al. does not disclose specific objects or portions thereof that are playable by a player. More to the point, it acknowledges that Morioka et al. fails to disclose objects, or portions thereof, as being in focus according to operations performed by a player.

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Applicants respectfully note that while Kearney discloses targets (e.g., ships), there is no suggestion of a computational device that identifies a given target as selected. The cross-hairs identify a torpedo direction, rather than a target. Kearney fails to disclose objects (or portions) as being identified by a computational device, such as by being placed in focus.

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If Morioka et al. were modified to include the periscope, cross-hairs and targets of Kearney, the combined disclosure would clearly fail to teach a computational device that identifies a playable object by use of focus, and with other objects blurred based upon their distance from the playable object, as claimed (in whole or in part) in claims 1, 13 and 17.

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Because there is no reasonable expectation of success in combining the references to teach the claimed combinations, the Office Action fails to establish a *prima facie* case of obviousness for claims 1, 13 and 17. Dependent claims 2-12, 14-16 and 18-21 incorporate the limitations of independent claims 1, 13 and 17. Accordingly, the rejections of claims 1-21 under 35 U.S.C. § 103(a) are improper, and Applicants respectfully request they be withdrawn.

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VI. **CONCLUSION**

In view of the foregoing, Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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